

MEMORANDUM

DATE:	April 25 th , 2016
FROM:	Eric Lancaster
SUBJECT:	April Weekly Progress Report @ Gold King
TO:	Steven Way

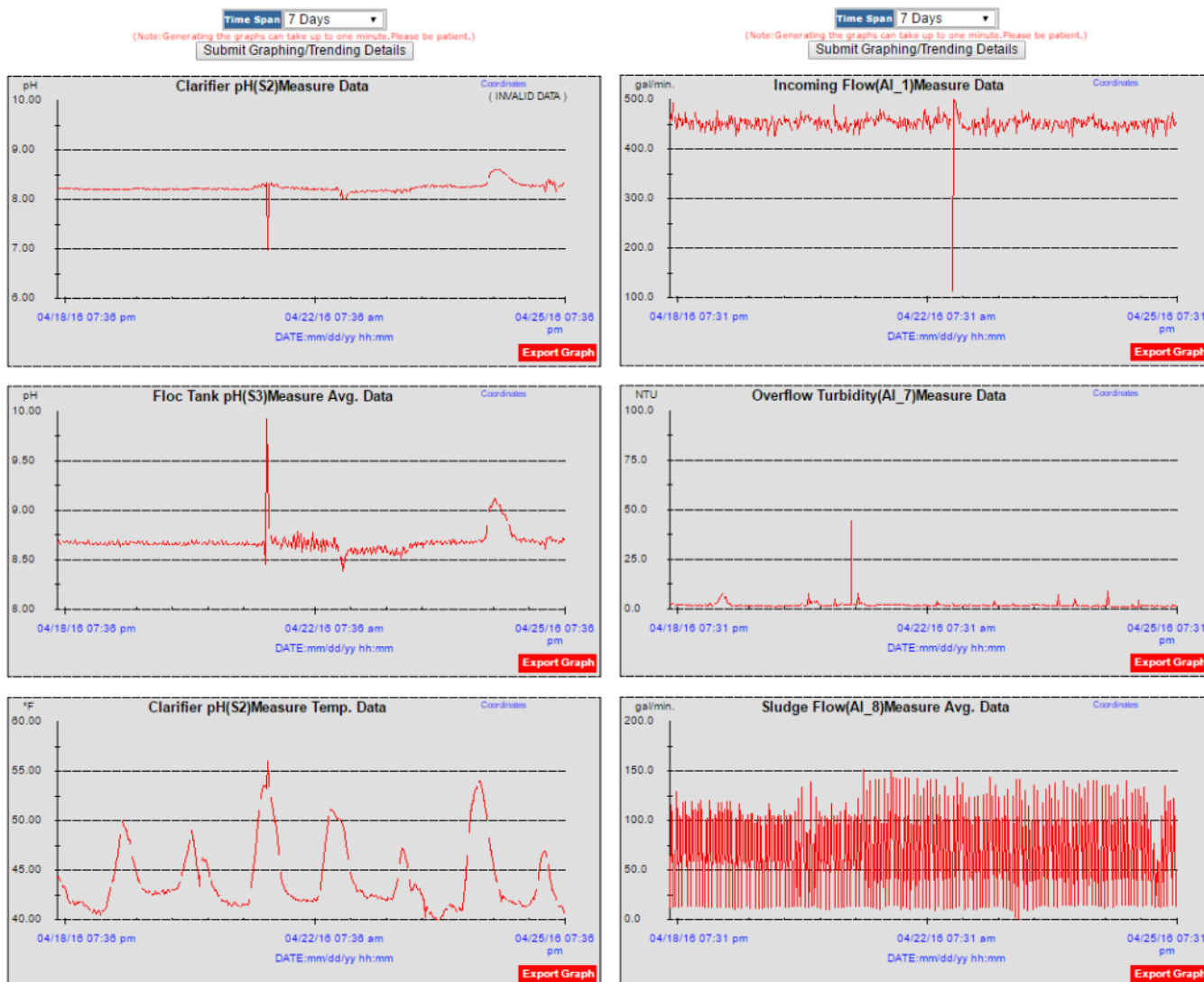
Project: Gold King Interim Water Treatment Plant (IWTP)
Location: Gladstone, Colorado
Prepared for: Emergency Response Unit – US EPA Region 8

Reporting Period: Apr 18 – Apr 25
Report No.: 18

I. General Operations Summary:

IWTS Function/Upsets

- The following graphs provide trending information during the previous 7 days. The dataloggers collect control information from the Lime Circuit (left) and Flow Circuit (right) Programmable Logic Controllers (PLCs) at the Gold King IWTP. Over the reporting period (4/18/16 – 4/25/16 inclusive) Alexco treated 4.56 million gallons at an average flow rate of 452 gpm with all discharged treated water leaving the 12" HDPE pipeline.



- Please note: Several days each week, the Alexco operators check the pH at both the flocculation tank and clarifier discharge. During this time, the probe is placed in vinegar (acid), and three pH buffers – 4, 7, and 10. While the probe is in the acid/buffer, the datalogger may capture one of those points for tracking purposes, which explains the occasional pH spikes seen on the graph.
- On 4/22, the Alexco operator shut-off flow to the plant temporarily while he was checking the incoming butterfly valve's performance. All other spikes in turbidity and/or drops in pH were during scheduled maintenance.

Communication System Function Status

- No issues – reliable operations during the reporting period.

Facility or System Related Work, including Repairs & Completions

- **Installation of Incoming Flow Meter** – Alexco has moved the outgoing flow meter to the incoming flow meter location (4/11/2016). A replacement flow meter was ordered and installed in the outgoing flow meter position. The operators are now able to compare the flows from both meters.
- **Stress Test** – The stress test was completed on 4/12/2016 by Alexco, Weston, and ER. Preliminary results were provided to the group on Friday, 4/22/16 but Alexco is waiting for Weston's samples to confirm. In general, the system performed well, allowing a surge of 1,200 gpm to pass through the plant without issue; incoming and outgoing samples were taken by Weston at flow rates of up to 950 gpm.
- **Electrical Upgrades** – Alexco's selected electrical contractor (Rapid Energy) began electrical upgrades on Friday, April 15th. These improvements will allow the IWTP to pass a final electrical inspection by the State Inspector.

II. Identified Problems, Causes, and Solutions (Planned or Implemented)

- **Spring Melt Contingency Updates:**
 - **Second Clarifier** – Alexco has received written notice to move forward with the installation/operation of a rental clarifier and supporting infrastructure required for spring melt. Alexco is targeting operation of this expanded system by May 10th.
 - **Additional Bags** – Alexco has additional textile bags (2X 125' x 45 and 1X 90' x 45') located at site that can contain an additional 2,000 CY of sludge. Alexco is able to install one or two of these additional textile bags as needed during spring melt.

III. System Inspections – Specific elements inspected and finding

- N/A

IV. Site Status

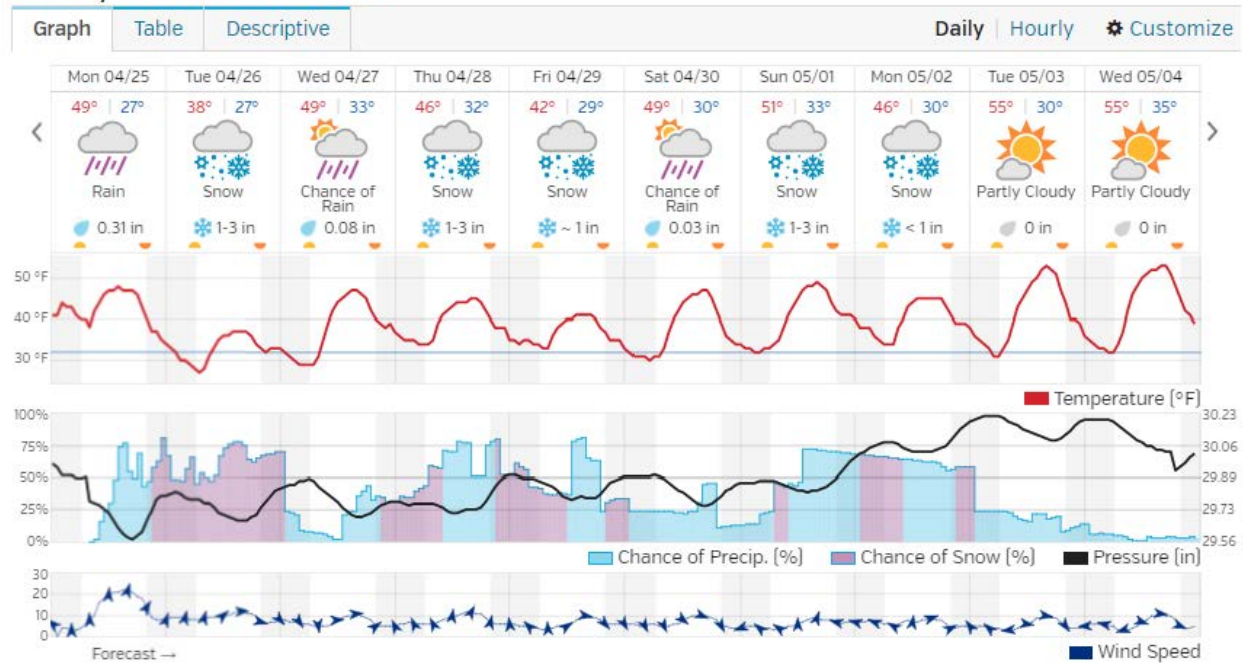
Personnel and equipment onsite

- Alexco currently employs one full-time employee (FTE) who lives in Silverton and oversees all operations at the Gold King IWTP. He is supported by remote operators in Denver, and local sub-contractors as needed.

Weather conditions

- Weather Underground Report for Silverton, CO (4/25/2016 – 5/4/2016)

10-Day Weather Forecast



Site Images



Photo 1: Site from the road near the IWTP discharge pipe – Taken on 4/12/2016